

Serial No. 09/849,594

Docket No.: KCC-15,481

REMARKS

Applicants' undersigned attorney thanks the Examiner for her comments. Applicants respectfully request reconsideration of this patent application, particularly in view of the above Amendment and the following remarks. Currently, Claims 1, 3-10, 12-16, 18-29, and 31-32 are pending.

Amendment to the Claims

Claims 1, 3-10, 12-16, 18-29, and 31-32 have been examined with no claims being allowed. Claims 1, 14, 18, 19, and 27 have been amended herein. No new matter has been added by this Amendment.

Applicants have amended Claims 1, 14, and 27 to eliminate the limitation of a pattern width of at least 0.21 inch.

Applicants have further amended Claims 1, 14, and 27 to include the limitation of a "non-releasable" leak-proof seal. Support for this amendment is provided throughout the specification, such as at page 9, lines 1-4.

Applicants have further amended Claims 1 and 27 to include the limitation of the at least two layers being bonded together along an edge of at least one of the layers. Support for this amendment is provided at page 13, lines 9-11, and in Fig. 1. Applicants have also amended Claim 1 to include the limitation of the strength of the seal being optimized. Support for this amendment is provided at page 3, lines 11-12.

Applicants have further amended Claim 14 to recite the first layer as a liquid-impermeable material, rather than a liquid-impermeable, nonwoven laminate, and to further recite the limitations of the first liquid-impermeable material being included in at least one containment flap, and the second liquid-impermeable material being included in a garment. Applicants have amended Claims 18 and 19 to be consistent with the amended form of Claim 14. Support for these amendments is provided at page 8, lines 16-17, and at page 11, lines 19-21.

No additional fee is due for this Amendment because the number of independent claims remains unchanged and the total number of claims also remains unchanged.

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Claim Rejections - 35 U.S.C. §112

The rejection of Claims 1, 3-10, 12-16, 18-29, and 31-32 under 35 U.S.C. §112, first paragraph, as failing to comply with the written description requirement is respectfully traversed. Applicants have amended independent Claims 1, 14, and 27 by removing the limitation of "at least 0.21 inch," thereby rendering this rejection moot. Accordingly, Applicants respectfully request reconsideration and withdrawal of this rejection.

Claim Rejections - 35 U.S.C. §103

The rejection of Claims 1, 3-10, 12-16, 18-29, and 31-32 under 35 U.S.C. §103(a) as being unpatentable over Bridges et al. (U.S. Patent 5,624,420, hereinafter "Bridges") in view of EP 0 677 284 (hereinafter "EP '284") is respectfully traversed, particularly in view of the above Amendment and the following remarks.

To establish a prima facie case of obviousness, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Because Bridges discloses a "tear line" having sufficient weakness, Bridges fails to expressly or impliedly suggest Applicants' claimed "non-releasable, leak-proof seal." Furthermore, since Bridges discloses a "tear line" extending from a waist opening to a leg opening in the front of a garment and EP '284 discloses containment flap constructions that include an elastic member bonded between two layers, there is no suggestion or motivation for combining the teachings of Bridges with the teachings of EP '284. More particularly, the purpose of the tear line in Bridges would be defeated if the bond pattern in EP '284 were combined with the garment in Bridges, because the bond pattern in EP '284 is designed to maintain an elastic member between two layers and is not designed to be weak or capable of tearing. Conversely, it would be counter-intuitive to combine the tear line of Bridges with the containment flaps of EP '284 because a tear line within a containment flap would result in leakage upon tearing.

Applicants' invention, as recited in independent Claims 1, 14, and 27, requires at least two layers of liquid-impermeable material bonded together with at

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least three parallel rows of bond points forming a *non-releasable*, leak-proof seal. At least one of the bond points in each of the rows is equally spaced apart from at least three other bond points such that each bond point is within about 0.001 inch to about 0.20 inch of at least one other bond point, with the bond points in adjacent rows offset from one another.

Bridges discloses, at most, three parallel rows of bond points (Figs. 1E and 1F), but each row does not include at least one bond point that is equally spaced apart from at least three other bond points because the outer two rows have twice the distance between bond points as the inner row. Thus, each of the bond points in each of the outer rows is only equally spaced apart from two other bond points and no single bond point is equally spaced apart from at least three other bond points.

As pointed out by the Examiner, Bridges discloses that the size, shape, and spacing of the bonds may be varied by those having ordinary skill in the art in order to balance the needs of strength and tearability, in view of the particular materials and processing parameters employed. A balance must be achieved between sufficiently weakening the material to permit tearing, against sufficiently spacing the bond sites so that the material retains sufficient strength to prevent premature opening. (Col. 6, lines 25-41).

Bridges fails to disclose or suggest a bond or seal that is either non-releasable or leak-proof. Instead, Bridges discloses a "tear line," which, as its name suggests, is a line of bond points that is designed to be torn apart. Furthermore, Bridges discloses that the *weakness* of the tear line is optimized such that the tear line is sufficiently weak to permit tearing (Col. 6, lines 34-35). Thus, the tear line in Bridges is not non-releasable, nor is the strength of the bond optimized.

As illustrated in the Example on page 13, line 7 – page 15, line 6, of the specification of the present application, a point bond section having a relatively short machine direction spacing and a relatively large pattern width provides protection against leakage. Bridges refers to the pattern width as "overlap" when more than one bond point is included within the pattern width. Contrary to Applicants' use of a relatively large pattern width to achieve a strong, non-releasable

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bond, Bridges discloses the use of overlapping or closely spaced bond points to achieve sufficient *weakness* of the tear line (Col. 6, lines 46-49 and 61-64).

Since the tear line in Bridges must be weak enough to permit tearing, it is unlikely that a person skilled in the art would modify the size, shape, and/or spacing of the bonds in Bridges to render the tear line "non-releasable" or "leak-proof." Instead, the bond points in the tear line of Bridges are sufficiently close together so that the material is sufficiently weakened to permit the specific material to tear progressively along the tear line, and are sufficiently spaced apart so as to retain sufficient residual strength of the unbonded fabric such that premature opening of the tear line will not occur (Col. 6, lines 61-67). Thus, it is unlikely that a person skilled in the art would create a tear line including bond points that are equally spaced apart from at least three other bond points because, as disclosed by Applicants, such spacing results in a non-releasable bond.

Bridges also fails to disclose or suggest ultrasonic bond points bonding together at least two layers of liquid-impermeable material. The tear line in Bridges bonds together the inner layer and the outer layer of a garment. Although Bridges lists a number of suitable materials for the inner layer and outer layer of the garment, there is no suggestion that both the inner layer and the outer layer are liquid-impermeable. Since the garment includes an absorbent assembly positioned between the inner and outer layers, it would be illogical for the inner layer to be liquid-impermeable because a liquid-impermeable material would prevent any liquid from reaching the absorbent assembly.

As recited in Applicants' independent Claims 1 and 27, the at least two layers of liquid-impermeable material are bonded together along an edge of at least one of the layers. Bridges fails to disclose or suggest locating the tear line along an edge of any layer, but instead teaches *away* from locating the tear line along an edge. More particularly, as disclosed in Bridges, if the tear lines are located near the side seams (i.e., near the edges of the inner and outer layers), the caretaker generally can not tear at both places without turning the child or changing hand positions (Col. 3, lines 58-61). In addition, Bridges suggests that the side seams may be constructed with maximum strength if the tear line is located other than at the side seams (Col. 3,

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lines 61-63). Thus, Bridges discloses point-bonded tear lines positioned *away* from the edges of the inner and outer layers.

As recited in Applicants' independent Claim 14, the layers of liquid-impermeable material are in a containment flap and a garment, respectively, such that the non-releasable, leak-proof seal bonds the containment flap to the garment. Bridges fails to disclose or suggest a plurality of ultrasonic bond points joining a containment flap to a garment and forming a non-releasable, leak-proof seal between the containment flap and the garment. Instead, the tear lines in Bridges are located on a front portion of the garment extending from the waist opening to the leg openings, thereby enabling a caretaker to tear the lines apart in order to remove the garment from the wearer. There is no suggestion in Bridges to attach containment flaps to a garment using a plurality of ultrasonic bond points.

EP '284 fails to overcome the deficiencies of Bridges. EP '284 does not disclose or suggest a bond pattern for attaching containment flaps to a garment, but instead discloses bond patterns for securing an elastic member within a containment flap.

Even if the bond pattern in EP '284 were combined with the garment of Bridges, there would be no expectation of success in achieving the non-releasable, leak-proof seal of Applicants' invention because the bond pattern would necessarily be applied in such a manner as to create a tear line having sufficient weakness. Absent impermissible hindsight, the resulting combination of Bridges and EP '284 would not disclose or suggest the attachment of containment flaps to a garment using bond points, nor would the resulting combination disclose or suggest the location of a non-releasable, leak-proof seal along an edge of at least one layer of liquid-impermeable material.

For at least the reasons given above, Applicants respectfully submit that the teachings of Bridges in view of EP '284 fail to disclose or suggest Applicants' claimed invention. Accordingly, reconsideration and withdrawal of this rejection is respectfully requested.

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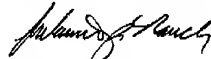
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Conclusion

Applicants intend to be fully responsive to the outstanding Office Action. If the Examiner detects any issue which the Examiner believes Applicants have not addressed in this response, Applicants' undersigned attorney requests a telephone interview with the Examiner.

Applicants sincerely believe that this Patent Application is now in condition for allowance and, thus, respectfully request early allowance.

Respectfully submitted,



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